REMARKS

This is intended as a full and complete response to the Office Action dated January 9, 2004, having a shortened statutory period for response set to expire on April 9, 2004. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-33 remain pending in the application and are shown above. Claims 4-8, 10-12, and 30-31 have been cancelled by Applicant. Applicant has amended claims 1-3, 9, 13, 15, 24, and 28-29. New claims 34-46 have been added. Claims 18-23, 26, and 32-33 are indicated to be allowed by the Examiner. Claims 1-3, 9, 13-17, 24-25, and 27-29 are rejected, and claims 4-8, 10-12, and 30-31 are objected to by the Examiner. Reconsideration of the rejected and objected to claims is requested for reasons presented below.

Claims 1-3, 9, 13-17, 24-25 and 27-29 stand rejected under 35 USC § 103(a) as being unpatentable over *Evans et al.* in view of *Paulsson* (U.S. Patent Application No. 2001/0030076 A1). The Examiner states that *Evans et al.* discloses, particularly in Figures 1-2, an encapsulated control line (designated by letter A) containing a crescent-shaped sheath or housing (designated as number 14) and two metal tubulars (designated as number 12 and 13) that serve as control lines. The Examiner acknowledges that *Evans et al.* does not disclose placing the sheath 14 between an expandable tool and the wall of the wellbore. The Examiner then uses *Paulsson* to teach placing cables and sensors between an expandable downhole tool and a wall of the wellbore. The Examiner states that *Paulsson* discloses a receiver 20 having sensors 22 and an associated signal cable 30, both residing against an expandable section 50 of fluid conduit 40. The Examiner states that *Paulsson* teaches expanding the expandable section 50 to force the receiver into contact with the wellbore. Next, the Examiner states that the sensors 22 are encapsulated in polyurethane casing 142 and a semi-rigid rubber compound. The Examiner concludes that it would have been obvious to place the protective encapsulation of *Evans et al.* between an expandable tool and the wall of the wellbore to avoid control line failure as a result of unexpected excessive radial forces during expansion of the tool.

Applicant respectfully traverses the rejection to claims 1-3, 9, 13-17, 24-25, and 27-29. Referring generally to Figures 1 and 2 of *Evans et al.*, *Evans et al.* teaches production tubing (letter B) having control tubes (numbers 12 and 13) within a crescent-shaped housing (number 14) mounted to the outer surface (number 21) of the production tubing. As shown in Figure 4 of *Evans et al.*, rubber packers (letter E) of an annular blowout preventer (letter M), which are disposed above the surface of the wellbore (letter W) in the wellhead (letter X), are expanded inwardly into contact with the housing and the production tubing. The production tubing B of *Evans et al.* is not expandable, as the packers E are expanded into the housing 14 and the production tubing B; therefore, the production tubing B cannot be used to designate the expandable downhole tool or tubular body recited in the claims.

Regarding claims 1-3, *Paulsson* discloses, as shown in Figures 1-6, a fluid conduit 40 having receiver deployment sections in the form of expansible sections 50. *See Paulsson*, paragraph [0034], lns. 11-14 and paragraph [0036], lns. 9-11. The expansible sections 50 of *Paulsson* are located adjacent to receivers 20 to press the receivers 20 against the wall 3 of the casing 5. *See id.*, paragraph [0036], lns. 9-11 and paragraph [0046]. Each expansible section 50 includes a fluid conduit section 42 and an expansible sleeve 52 disposed around the fluid conduit section 42. *See id.*, paragraph [0047]. The fluid conduit 40 may be production tubing or coiled tubing. *See id.*, paragraph [0034], lns. 11-14. The fluid conduit 40 does not expand to a larger inner diameter; rather, the expansible sleeve 52 placed over the tubing 40 expands by fluid pressure to push the receiver 20 into the casing 5. *See id.*, paragraph [0047]. In *Paulsson*, the inner diameter of the fluid conduit does not expand when the expansible sleeve 52 pushes the receiver 20 into the casing 5; instead, the outer diameter and inner diameter of the expansible sleeve 52 expand. Production fluid is flowable through the inner diameter fluid conduit 40 of *Paulsson*, and is not flowable through the inner diameter of the expansible sleeve 52. Therefore, *Paulsson* does not teach, show, or suggest the expandable downhole tool having a larger inner diameter for flowing production fluid therethrough in the expanded state than in the unexpanded state, as recited in claims 1-3.

Similarly, *Evans et al.* does not teach, show, or suggest the expandable downhole tool having a larger inner diameter for flowing production fluid therethrough in the expanded state than in the unexpanded state, as recited in claims 1-3. The packer E of *Evans et al.* cannot be used to designate the expandable downhole tool recited in claims 1-3, as production fluid is not flowable through the packer E. Additionally, the packer E of *Evans et al.* cannot be used to designate the expandable downhole tool recited in claims 1-3 because the packer E does not possess a larger inner diameter in the expanded state than in the unexpanded state, as the packer E expands inward toward the housing 14. The production tubing B of *Evans et al.* is not expandable; therefore, it cannot be used as the expandable downhole tool and cannot have a larger inner diameter for flowing production fluid in the expanded state than in the unexpanded state, as recited in claims 1-3.

Therefore, *Evans et al.*, alone or in combination with *Paulsson*, does not teach, show, or suggest an encapsulation for use in a wellbore, comprising a first arcuate wall having a first end and a second end; and a second wall having a first end and a second end, the first and second ends of the second wall contacting the first and second ends of the first arcuate wall so as to form a line housing between the first and second walls, wherein the encapsulation is disposable between an expandable downhole tool and a wall of a wellbore, and wherein at least a portion of the first arcuate wall engages the wall of the wellbore when the expandable downhole tool is in an expanded state, the expandable downhole tool having a larger inner diameter for flowing production fluid therethrough in the expanded state than in an unexpanded state, as recited in claim 1 and its dependent claims 2-3. Accordingly, Applicant respectfully requests removal of the rejection to and allowance of claims 1-3.

Regarding claims 9, 13-17, 24-25, and 27-29, *Paulsson*, in paragraph [0034], lines 14-18, states that the expansible sleeve 52 may be considered as a packing element when the array is disposed in the wellbore, and that the apparatus may be described as a clamped receiver array using production tubing-conveyed packer elements. The receiver 20 of *Paulsson* is expanded using the resilient, expansible sleeve 52, which is actuated by fluid within the fluid conduit 40. *See Paulsson*, paragraphs [0046] and [0053]. The resilient expansible sleeve 52 is a rubber bladder

placed over the outside of the fluid conduit 40 which is inflated to expand the receiver 20 into the casing 5. *See id.*, paragraphs [0047], [0049], and [0086]. Preferably, the resilient sleeve 52 is an elastomer. *See id.*, paragraph [0053], lns. 11-12. According to paragraph [0053], lines 7-10 of *Paulsson*, "[t]he sleeve can be fabricated from any material having a tendency to expand when subjected to a differential pressure and preferably returned to its original size and shape once the applied pressure has been removed." Thus, no portion of the apparatus 10, including the expansible section 52 and the receiver 20, remains expanded upon reduction of pressure applied to inflate the expansible sleeve 52, as the expansible sleeve 52 is resilient and returns to its original size and shape upon reduction of the pressure to deflate the expansible section 52.

Regarding *Evans et al.*, as stated above in relation to claims 1-3, the production tubing B cannot be used to designate the expandable downhole tool or expandable tubular of claims 9, 13-17, 24-25, and 27-29 because the production tubing B does not expand. If the packer E is used to designate the expandable downhole tool or expandable tubular of claims 9, 13-17, 24-25, and 27-29, the packer E of *Evans et al.* is a rubber packer. *See* col. 3, lns. 49-55. That the packer E is a rubber packer implies that the packer E is inflatable or compressible to extend toward the production tubing B and that the packer E is thus deflatable or decompressible to retract upon reduction of applied pressure to the packer E. In any event, the rubber packer is resilient and does not retain its expanded shape upon reduction of expansion force.

With respect to claim 9, *Evans et al.* does not teach, show, or suggest the sheath 14 deforming when the packer E is expanded against the wall of the wellbore W by expansion force applied to the packer E and remaining in contact with the wall of the wellbore W upon reduction of the expansion force. The sheath 14 does not contact the wall of the wellbore W at any point in the operation, whether the expansion force is applied to the packer E or not applied to the packer E. Additionally, the sheath 14 of *Evans et al.* does not remain in the expanded position, but returns to the unexpanded position, when the applied expansion force is reduced. Therefore, *Evans et al.*, alone or in combination with *Paulsson et al.*, does not teach, show or suggest the encapsulation deforming to the general contour of the wall of the wellbore when the downhole tool is expanded against the wall of the wellbore by expansion force applied to the downhole

tool and remaining in contact with the wall of the wellbore upon reduction of the expansion force, as recited in claim 9. Applicant therefore respectfully requests removal of the rejection to and allowance of claim 9.

Regarding claim 13 and its dependent claim 14, *Evans et al.* does not teach, show, or suggest the sheath 14 deforming to the general contour of the wall of the wellbore W when the packer E is expanded against the wall of the wellbore W by expansion force applied to the packer E and remaining in contact with the wall of the wellbore upon reduction of the expansion force. The sheath 14 does not contact the wall of the wellbore W at any point in the operation, whether the expansion force is applied to the packer E or not applied to the packer E. Additionally, the sheath 14 of *Evans et al.* does not remain in the expanded position, but returns to the unexpanded position, when the applied expansion force is reduced. Therefore, *Evans et al.*, alone or in combination with *Paulsson et al.*, does not teach, show or suggest the encapsulation deforming to the general contour of the wall of the wellbore when the downhole tool is expanded against the wall of the wellbore by expansion force applied to the downhole tool and remaining in contact with the wall of the wellbore upon reduction of the expansion force, as recited in claims 13-14. Accordingly, Applicant respectfully requests removal of the rejection to and allowance of claims 13-14.

Regarding claim 15 and its dependent claims 16-17 and 25 as well as claim 24 and its dependent claim 27, the packer E of *Evans et al.* is not capable of retaining the second or enlarged inner diameter obtained by expansion of the packer E when expansion force is reduced, as the packer E is an inflatable rubber packer. In fact, the packer E of *Evans et al.* does not expand to an enlarged inner diameter, but when expanded to the location around the production tubing B is decreased in inner diameter compared to its original, unexpanded position. As stated above, *Paulsson* teaches an inflatable expansible sleeve 52 which is not capable of retaining the second inner diameter obtained by expansion of the sleeve 52 when expansion force is reduced. Therefore, *Evans et al.*, alone or in combination with *Paulsson*, does not teach, show, or suggest an expandable downhole tool, comprising a substantially tubular body forming an outer surface, the tubular body expandable by a first expansion force from a first inner diameter to a second, enlarged inner diameter; and an enclosed line housing

defining an arcuate outer surface disposed on the outer surface of the tubular body, wherein the enclosed line housing is deformable upon expansion of the tubular body to the second inner diameter, and wherein the tubular body is capable of retaining the second inner diameter when the first expansion force is reduced to a second expansion force, as recited in claims 15-17 and 25. Moreover, *Evans et al.*, alone or in combination with *Paulsson*, does not teach, show, or suggest an expandable downhole tool, comprising a substantially tubular body forming an outer surface; an enclosed line housing disposed on the outer surface of the tubular body; and a line disposed in the enclosed line housing, wherein the line is selected from one of a control line and a data line, wherein the line housing is deformable and an inner diameter of the tubular body is enlarged upon expansion of the tubular body by application of expansion force to the tubular body, and wherein the enlarged inner diameter is retained when the amount of expansion force applied to the tubular body is reduced, as recited in claim 24 and its dependent claim 27. Applicant therefore respectfully requests removal of the rejection to and allowance of claims 15-17, 24-25, and 27.

New claim 46 depends from claim 24; therefore, claim 46 is allowable for at least the same reasons that claim 24 is allowable. Additionally, neither the packer E of *Evans et al.* nor the expansible sleeve 52 of *Paulsson* lines the wellbore upon expansion of the tubular body, as recited in claim 46. Accordingly, *Evans et al.*, alone or in combination with *Paulsson*, does not teach, show, or suggest an expandable downhole tool, comprising a substantially tubular body forming an outer surface; an enclosed line housing disposed on the outer surface of the tubular body; and a line disposed in the enclosed line housing, wherein the line is selected from one of a control line and a data line, wherein the line housing is deformable and an inner diameter of the tubular body is enlarged upon expansion of the tubular body by application of expansion force to the tubular body, and wherein the enlarged inner diameter is retained when the amount of expansion force applied to the tubular body is reduced, wherein the tubular body lines the wellbore therearound upon expansion of the tubular body into substantial contact with the wall of the wellbore, as recited in claim 46. As such, Applicant respectfully requests allowance of claim 46.

Regarding claim 28, the rubber packer E of *Evans et al.* is resilient, as it is inflatable when pressure is applied and deflated when pressure is not applied to the packer E. Also, as stated above, the expansible sleeve 52 of *Paulsson* is resilient. Therefore, *Evans et al.*, alone or in combination with *Paulsson*, does not teach, show, or suggest an encapsulation disposed between an expandable downhole tool and an inner diameter of a wellbore, the encapsulation comprising at least two walls fabricated from a deformable material, wherein the encapsulation contacts the inner diameter of the wellbore when the downhole tool is expanded, and wherein the downhole tool is not resilient, as recited in claim 28. Applicant respectfully requests removal of the rejection to and allowance of claim 28.

With respect to claim 29, the packer E of *Evans et al.* does not remain expanded upon release of pressure applied to an inner diameter of the packer E, as the rubber packer E deflates upon release of the pressure. Additionally, the expansible sleeve 52 of *Paulsson* does not remain expanded upon release of pressure applied to an inner diameter of the expansible sleeve 52, as the expansible sleeve 52 deflates upon release of the pressure. Thus, *Evans et al.*, alone or in combination with *Paulsson*, does not teach, show, or suggest a method of protecting one or more control lines within a wellbore, comprising providing a downhole tool having an enclosed line housing therethrough; expanding the downhole tool into the wellbore by applying pressure to an inner diameter of the downhole tool, thereby radially moving the line housing through an annulus between the downhole tool and the wellbore; and protecting the one or more control lines with the enclosed line housing during the expansion, wherein the downhole tool remains expanded upon release of the pressure, as recited in claim 29. Applicant therefore respectfully requests removal of the rejection to and allowance of claim 29.

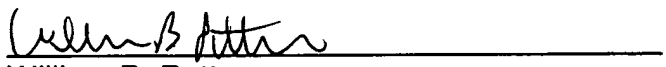
New claim 45 depends from claim 29; therefore, claim 29 is allowable for at least the same reasons that claim 29 is allowable. Furthermore, claim 29 is allowable because the packer E of *Evans et al.* and the sleeve 52 of *Paulsson* are each resilient. As such, *Evans et al.*, alone or in combination with *Paulsson*, does not teach, show, or suggest a method of protecting one or more control lines within a wellbore, comprising providing a downhole tool having an enclosed line housing therethrough; expanding the downhole tool into the wellbore by applying pressure to an inner diameter of the

downhole tool, thereby radially moving the line housing through an annulus between the downhole tool and the wellbore; and protecting the one or more control lines with the enclosed line housing during the expansion, wherein the downhole tool remains expanded upon release of the pressure and wherein the downhole tool is not resilient, as recited in claim 45. Applicant thus respectfully requests allowance of claim 45.

Claims 4-8, 10-12 and 30-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has rewritten claims 4-8 to include the base claim and any intervening claims in substantially the same form as previously submitted as new claims 34-38. Furthermore, Applicant has rewritten claims 10-12 to include the base claim and any intervening claims in substantially the same form as previously submitted as new claims 39-42. Applicant has also rewritten claims 30-31 to include the base claim and any intervening claims in substantially the same form as previously submitted as new claims 43-44. Applicant therefore respectfully requests allowance of new claims 34-44.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests allowance of the claims.

Respectfully submitted,



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